

REMARKS

The present Amendment is in response to the Office Action dated November 30, 2004 in reference to the above-identified application. Filed concurrently herewith is a request for a three-month extension of time so that the present Amendment is due by May 30, 2005 (Memorial Day – a Federal Holiday), thus making this response due no later than May 31, 2005.

Claims 1-12 have been pending in this application. In the Office Action, claims 4 and 9 are objected to as being indefinite based on the phrase “in it’s entirety”. With respect to the prior art, claims 1-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over newly cited U.S. Patent No. 5,959,663 to Oba et al. in view of U.S. Patent No. 5,626,703 to Iszawa et al. and U.S. Patent No. 5,982,538 to Shikama et al. Applicant notes that section 6 of the Office Action (page 3), in its heading, refers only to claims 1-8 but that the text which follows on pages 3-5 presumably may reference to each of claims 1-12. Clarification on the discrepancy is respectfully requested. Also, to the extent there is any duty under MPEP §713.04, Applicant’s representative hereby makes of record that a telephone conference occurred with Examiner Chang on May 11, 2005 in which procedural matters were discussed with general reference to the claims, but the actual merits of the claims were not discussed.

Before addressing the merits of the Examiner’s claim rejections, the Examiner will see that new claims are presented in this Amendment. Applicant has cancelled previous claims 1-12 and replaced them with new set claim set 13-41 which are consecutively numbered as such in accordance with 37 C.F.R. §1.121. The current claim set has two independent method

claims (13, 19) and three independent device claims (25, 33, 40). Of these, method claim 13 generally corresponds to previous independent claim 1, while device claim 25 generally corresponds to previous independent claim 2. For the Examiner's convenience, below is provided a mapping between the previous claim set and the current claim set. This mapping generally indicates those claims currently provided which correspond to those in the previous claim set 1-12. Those claims which are bracketed have the same or similar recitations, but are derived from different base claims.

Previous Claim Set	Current Claim Set
1	13
2	25
3	15, [26]
4	16, [27]
5	17, [31], [35]
6	18, [32], [36]
7	15, [26]
8	--
9	27, [16]
10	31, [17]
11	36, [18], [32]
12	28

The inclusion of this mapping should not be construed as any representation that the recitations in the new claims are identical to those previously presented. Rather, it is simply provided for the Examiner's convenience as a cross-reference between the two sets.

At the outset, Applicant continues to disagree the of the claims of the present application (whether previously or currently presented) are obvious under 35 U.S.C. §103(a). As an informal matter, the Examiner may note that the objections to previously presented claims 4 and 9, as they relate to the phrase "in it's entirety", are inapplicable in connection with the current claims. That is, the current claims (16 and 27) which correspond to previously

presented claims 4 and 9 no longer contain this phraseology. However, this should not be construed as a concession by the Applicant that such phraseology was either confusing or indefinite. Rather, Applicant maintains that these claims are patentably distinct over the art without requiring such wording.

Attached to this response as Exh. A is the declaration of Anne Solveig Tonnesen (the "Tonnesen Decl.") who is a program manager for the Applicant Cyviz AS. Ms. Tonnesen's qualifications are generally set forth in ¶¶1 and 2 of her declaration, as well as attachment 1 thereto. Ms. Tonnesen's declaration, in part, comments on various statements made by the Examiner in the most recent Office Action as they relate to the claims which have been rejected. Where appropriate for purposes of this response, Applicant will make reference to the Tonnesen Decl. by paragraph number.

Applicant also incorporates by reference the remarks accompanying its previous amendments. In particular, Applicant incorporates the discussion about the criteria for an obvious analysis, as generally found at pp. 9 & 10 of the amendment mailed September 8, 2004. As an introduction, however, the Examiner may see that the Tonnesen Decl., ¶¶6-23 contain a discussion of stereoscopic video signals, as well as Shikama et al. '538, Izawa et al. '703 and the newly cited primary reference to Oba et al. '663.

It is noted that many, if not all, of the Examiner's rejections rely in part on a determination that various features recited in the claims are implicitly present in the cited references (primarily Oba et al. '663). To the extent the Examiner maintains that any of the claims are taught alone, either expressly or by implication, in Oba et al. '663 then it would appear that a rejection under

§103 is inconsistent with such position. In any event, as set forth in MPEP §2112(IV) “[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.” *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993). Furthermore, “[i]n relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990), It is respectfully submitted that each occasion in the Office Action in which the Examiner contains that a claimed feature is “implicitly” taught by a reference fails to correspond with these guidelines.

With respect to the Examiner’s rejection of claim 1 over Oba et al., Applicant respectfully disagrees that the input video signal (V_A) in Oba comprises “pictures” intended for the left and right eyes. As described more particularly in the Tonnesen Decl., ¶¶24 & 25, the input video signal in Oba is a standard 2D video signal , from which “pictures” for the left and right eyes are generated by manipulating the 2D video signal through image transform algorithms. Thus, even though Oba et al. might intend for left and right pictures to be seen, there is no incoming “picture” signal. For this reason, it is submitted that new claim 13 is allowable. Similar reasoning also supports the allowability of at least new independent method claim 19, which positively recites the receipt of an incoming picture signal which alternates cyclically between a right eye picture and a left eye picture.

Further, in that “picture signals” do not exist until after processors 22L and 22R in Oba et al., it follows that there are no odd numbered pictures

which are decoded and stored in a first picture storage or even numbered pictures which are decoded and stored in a second picture storage. Since Oba's storage is identified as frame memories 36L & 37R (presumably a typo), it may be seen with reference to Fig. 6 of the reference that one does not receive odd numbered pictures while the other receives the even numbered pictures.

As supported in the Tonnesen Decl. at ¶¶26-29, the same incoming signals in Oba et al. (which comprise the 2D video signal (V_A), a key signal (K_A) and a background signal (V_{BK})) are transmitted to each of the processors 22L and 22R. Thus, each storage 36L and 37R receives the same information without any distinction between left and right. The Examiner might note that in new claims 16, 19, 27 and 33 more focused recitations are made that odd and even numbered pictures are transmitted to separate projectors.

Other distinctions between Oba and the present invention as claimed are evident. For example, it is submitted there is no decoding which takes place prior to Oba's frame memories since they receive the same signals. It is clearly evident from Fig. 6 of Oba that there is no processing which takes place prior to the input video signal (V_A) reaching the frame memories. For this reason as well, those claims of the present application which refer to decoding are not fully and fairly taught by Oba et al.

In addition, the Examiner's position that Oba incorporates a page selector since "it is implicitly true that the left eye picture signal and right eye picture signal are *separately processed* ...", not only relies on an incorrect premise, but fails to take into consideration the difference between the input signal of Oba and that of the present invention. The purpose of the page

selector in present invention is to separate out the left and right (or even and odd) portions of the incoming picture signal so that they may be transmitted along separate paths. Since Oba et al.'s input signal does not alternate between L and R, there would be no motivation to incorporate a page selector. It is, therefore, certainly not explicit or implicitly true that a page selector is included in Oba et al.

Nor would there be any motivation for the ordinarily skilled artisan to modify Oba et al. to provide a 3D input signal which alternates between left and right picture signals, regardless of the independent teaching in Izawa et al. As particularly pointed out in the Tonnesen Decl. at ¶33, altering the Oba et al. device in such a manner would, at the very least, be disruptive to the timing sequence within processors 22 and 22L, while causing the projectors to project out of sync with one another and at $\frac{1}{2}$ the frequency of the incoming signal. Not only would undesirable effects result, from the standpoint of the viewer, such a proposed modification but contravene Oba's intent that the left and right images be projected simultaneously. It is respectfully submitted then that those claims of the present application which recite a page selector (e.g. 25, 28, 33,34) are not explicitly or implicitly taught by Oba, or obvious modifications to Oba.

Periodic scanning of the picture storages are recited in claims 13, 14, 19 and 31. Of these, dependent claim 14 also recites that the storage areas within them are alternately scanned. This feature of periodic scanning is addressed by the Examiner in the Office Action on page 4, ¶2 in which the Examiner maintains that Oba et al. implies periodic scanning through Oba's discussion of raster scan address (also referenced by the Examiner on page

3, ¶1). Alternatively, the Examiner maintains that periodic scanning of frame memories is very well known in the art as evidenced by the teachings in Shikama et al.

Ms. Tonnesen addresses these points at ¶¶36-42 of her Declaration in which she concludes that the processing of individual pixels in Oba et al. (as opposed to pages or frames) do not necessarily imply periodic scanning. As to Shikama et al., the scanning is accomplished one raster at a time from the left and right frame memories. The prior art, thus, neither implicitly or explicitly describes the periodic scanning of first and second picture storages, but rather portions of them. Moreover, the prior art certainly does not teach, either alone or in combination, first and second picture storages which are organized as plurality of storage areas that periodically (or alternately and periodically) scanned. Applicant, thus, maintains that claims 13, 14, 19 and 31 are also allowable on this basis.

One of the final points raised by the Examiner is that the scanning rate differential is not explicitly taught in the referenes, but that the rate could be different due to the processing rate. The feature of differential scanning rate capabilities is set forth in newly presented claims 18, 32 and 36. Each of these claims depends from claims 17, 31 and 35, respectively, which themselves recite first and second picture generators respectively coupled to first and second projectors. Of these, claims 31 and 35 recite that the first and second picture generators periodically scan the first and second picture storages, while claim 17 does not include temporal language.

Notwithstanding Applicant's earlier comments that the Examiner's rejections are improper to the extent they rely on implicit teachings, Applicant

will nonetheless address the rejection. In this regard, the Examiner's attention is directed to ¶¶43-45 of the Tonnesen Decl. In this section, Ms. Tonnesen points to various statements in the Oba et al. reference which support that the timing is the same throughout the entire system and that the processing occurs simultaneously in both channels. Ms. Tonnesen also recognizes that Oba et al. does not appear to contemplate the ability to make corrections if rate changes were to occur. Moreover, since the two frame memories in Oba et al. only have one storage area then the Oba et al. device reads and process at the same speed as the incoming signal to avoid signals becoming mixed.

Therefore, Applicant disputes that there is any implicit teaching in Oba et al. of the ability to accommodate the different rates. Further, there would be not motivation to accommodate for such differentials in the Oba et al. since any such alteration would be disruptive and likely result in the degradation of the video signals.

The Examiner's final comment in Office Action is with regard to claim 12 (now akin to new claim 28), wherein the Examiner maintains that it is implicitly true that the decoder or image processor is coupled between the page selector and the image projectors. Applicant has previously argued that there is no decoder or page selector in Oba et al., so there is no need to repeat these arguments.

Certain new claims (e.g., 20-22, 24, 29, 30 and 37-39) have not been specifically. Certain one(s) of these claims relate to the plurality of picture storage areas within each of the first and second picture storages; the generator being coupled to each respective first and second storage by a

picture selector; and first and second area selectors each connected between a respective decoder and picture storage area. Additionally, at least claim 39 recites that each picture storage has its associated area selector and picture selector connected to different picture storage areas therein. Applicant maintains that each of these features also patentably distinguishes over the art.

Finally, new claims 40 and 41 are presented which are directed to the second embodiment of the present invention as shown and described in relation to Fig. 2.

No new matter has been added by this Amendment. However, due to this Amendment, a new filing fee calculation is provided as follows

Maximum Total Claims This Amendment		Total Claims Previously Paid For	
29	-	12	= 17 x \$ 25.00 = \$425.00
Total Independent Claims Per This Amendment		Maximum Independent Claims Previously Paid For	
5	-	2	= 3 x \$100.00 = \$300.00
Additional Filing Fee Due			\$725.00

Accordingly, our check no. 18859 in the amount of \$725.00 is enclosed. The Commissioner is hereby authorized to charge any deficiency in the payment of the required fee(s) or credit any overpayment to Deposit Account No. 13-1940.

Based on the foregoing, Applicant submit that the present application is in complete condition for allowance, and action to that end is courteously solicited. If any issues remain to be resolved prior to the granting of this



application, the Examiner is requested to contact the undersigned attorney for the Applicant at the telephone number listed below.

Respectfully submitted,


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CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.8

I hereby certify that the foregoing **AMENDMENT (19 pages)**, **DECLARATION OF ANNE SOLVEG TONNENSEN (25 pages)**, **Request for a Three-month Extension of Time (2 pages)** and **Check No. 18859 in the amount of \$725.00** is being deposited with the United States Postal Service as first-class mail in an envelope addressed to Mail Stop Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 3rd day of May, 2005.


Christy L. Burbank